WPS1820

POLICY RESEARCH WORKING PAPER 1820

Private Pension Funds in Argentina's New Integrated Pension System

Dimitri Vittas

Private pension funds in Argentina's new integrated pension system have shown a vigorous response and a robust performance in a highly uncertain economic environment. But despite their success in mobilizing long-term funds and in earning high real investment returns, the funds have suffered from high operating and marketing costs.

The World Bank
Financial Sector Development Department
August 1997

Summary findings

Argentina implemented a major reform of its pension system in 1994. The new system has a mixed public-and-private two-pillar structure. Its main elements are an unfunded, defined-benefit pillar operated by the state and paying a basic pension to all workers who meet the minimum eligibility period, and a fully funded defined-contribution individual capitalization pillar managed by specially authorized companies (AFJPs). The second pillar also has a public defined-benefit component, which is operated on an unfunded basis.

The new system replaced the old public pay-as-you-go pension system, which was facing immense financial pressures.

Vittas assesses the performance of the funded component of the second pillar. He finds that:

• The private pillar had attracted (by June 1996) 67% of all workers participating in the new integrated system. It also represents 60% of those who are active contributors. It has attracted many younger workers and has begun to mobilize a large, fast-growing pool of long-term financial resources.

• The AFJPs have earned very high real investment returns, offset by very high operating costs. Individual affiliates have so far earned negative real returns because of high commission charges. But in the long run, net returns are likely to be positive as assets accumulate and operating costs are better controlled.

• Effective coverage is quite low. Affiliates represent fewer than 60% of eligible workers and only about 40% of the labor force. Fewer than 30% of eligible workers and only about 20% of the labor force actively contribute.

• Because the new system is young, the number of beneficiaries is small, mostly recipients of survivorship and disability pensions.

• Market concentration is high, although lower than in Chile. The top three companies account for 47% of affiliates and assets; the top six account for 78%.

• In March 1997, asset allocation was 51% government bonds, 23% corporate equities and mutual fund shares, 17% bank deposits, and 7% corporate bonds. Equity holdings' share has been rising, mainly at the expense of bank deposits.

• Real rates of return average over 15% a year, although high commission charges substantially reduce the net real returns to individual workers. But costs are coming down sharply as a percentage of average assets. Net real returns for a worker's full career are expected to be highly positive so long as gross investment returns remain strong.

The AFJP system faces three main challenges: how to contain operating and marketing costs; how to increase effective coverage; and how to relax the draconian regulations while maintaining a stable, transparent, and safe system.

This paper — a product of the Financial Sector Development Department — is part of a larger effort in the department to study private pension funds and contractual savings. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Priscilla Infante, room F6P-204, telephone 202-473-7642, fax 202-522-3198, Internet address pinfante@worldbank.org. August 1997. (34 pages)

Financial Sector Development Department
World Bank

PRIVATE PENSION FUNDS IN ARGENTINA'S NEW INTEGRATED PENSION SYSTEM

Dimitri Vittas

Table of Contents

I am indebted to Paul Levy, Monika Queisser, Rafael Rofman and Anita Schwarz for insightful comments.

I. INTRODUCTION AND SUMMARY OF FINDINGS

INTRODUCTION

Argentina implemented a major reform of its pension system in 1994. The new system has a mixed public/private two-pillar structure. Its main elements are an unfunded defined benefit pillar operated by the state and paying a basic pension to all workers who meet the minimum eligibility period; and a fully funded defined contribution individual capitalization pillar managed by specially authorized companies, known as Administradoras de Fondos de Jubilaciones y Pensiones or AFJPs. The second pillar also has a public defined benefit component that is operated on an unfunded basis (see Box 1).

The new system became operational in July 1994 when it replaced the old public "pay-as-you-go" pension system that was facing immense financial pressures. With some notable exceptions, participation is compulsory on all workers, including the self-employed. Workers have the right to choose the defined benefit plan of the public component of the second pillar instead of the individual capitalization accounts of the funded component, while those who join the latter have the right to select and change their pension fund management company.

The new Argentine pension system is governed by two basic laws: Law 24241, which created the new integrated pension system and was enacted in October 1993; and Law 24463 on pension solidarity, which sought to limit the future cost of the public components of the new system and was enacted in March 1995 at the time of the Mexican crisis (see Box 2). Allowing for the ongoing integration of provincial pension schemes into the national system, one could argue that Argentina has implemented 3 major reforms of its pension system since 1993.

This paper provides an assessment of the performance of the funded component of the second pillar. The main topics covered include the structure and coverage of the private pillar, the mobilization of long-term savings, the investment policies, investment performance and operating efficiency of the pension funds, the provision and cost of disability and term life insurance, and the effectiveness of regulation and supervision. The paper draws on the statistical bulletins and several excellent papers published by the Economic Studies Unit of SAFJP.[1] A companion paper (Vittas 1997a) examines the relevance of the Argentine pension reform for Eastern European countries and focuses on the problems of the old pension system, the finances and functioning of the public pillar, especially the evolution of evasion and the continuing burden of past pension promises, and the similarities and differences with Chile and Switzerland.

---

[1] Recent papers that discuss the Argentine pension reform include Schulthess and Demarco (1996), Cottani and Demarco (1996), Rofman (1996), Rofman and Bertin (1996), Rofman and Stirparo (1996), Bertin and Perrotto (1996), and Grushka and De Biase (1996).

SUMMARY OF FINDINGS

The AFJP system has many features in common with the Chilean system. Only specialized companies are authorized to manage pension accounts, workers can only have one account, each company can only operate one pension fund, is required to charge the same prices and commissions to all its affiliates (except for the offer of loyalty discounts), and is required to arrange one group term life and disability insurance policy for all its affiliates. The system is heavily regulated and supervised to ensure both its soundness and fair treatment of affiliates. Disability and term life insurance as well as the decumulation phase (life annuities or scheduled withdrawals) are also organized along similar lines.

The record of the private pillar has been characterized by a vigorous response and a robust performance in a highly uncertain environment. Despite a slow start, the private pillar has succeeded in attracting by June 1996 67% of all workers who participate in the new integrated system. It also represents 60% of those who are active contributors (Schulthess and Demarco 1996). It has attracted many younger workers and has started to mobilize a large and fast growing pool of long-term financial resources. The assets of the pension funds reached 3.8 billion pesos or 1.4% of GDP in June 1996, and are expected to exceed 20 billion pesos (or 4% of projected GDP) by the year 2000.

The AFJPs have earned very high real investment returns, although they have also suffered from very high operating costs. Despite the high investment returns, individual affiliates have so far earned negative real returns because of the high commission charges. However, net returns are likely to be positive in the long run as assets accumulate and operating costs come under better control. The Argentine private pension pillar shares many of the strengths and weaknesses that have characterized the Chilean pension reform (Shah 1996, Vittas 1997b).

The following paragraphs summarize in bullet form some of the main features, achievements and shortcomings of the new system.

* **Coverage.** 5.6 million workers were affiliated to the AFJP system in March 1997, but only 2.8 million were active contributors. Affiliates represented less than 60% of eligible workers and only about 40% of the labor force. Active contributors were less than 30% of eligible workers and only about 20% of the labor force. Effective coverage is thus quite low.

* **Benefits.** As in Chile, benefits from the AFJP system take the form of life annuities or scheduled withdrawals. There are also disability and survivorship pensions. Because of the very young age of the new system, the number of beneficiaries is very small and consists mostly of survivorship and disability pensions.

* **Market Structure.** 25 companies started operations in July 1994, but following a number of mergers, their number has declined to 20. Most companies are joint ventures between domestic and foreign banks and insurance companies, though some have also been set up by trade unions or various groups of local institutions. The latter are in general small and account for a very small part of the market. One AFJP is operated by the state-owned Banco de la Nacion. Its market share has been declining and it now only has 8% of affiliates and 6% of funds under management.

* **Market Concentration.** Market concentration is quite high, though lower than in Chile. The top 3 companies account for 47% of affiliates and assets under management and the top 6 for

Box 1: The New Structure

With some notable exceptions (e.g. military, police and provincial workers), participation in the new system is compulsory for all workers, including the self-employed, but workers have a choice whether to join the private or public component of the second pillar.

The First Pillar. The first pillar, which is all public, is responsible for three main types of benefits: one permanent and two transitory:

(i) a basic universal pension (prestacion basica universal or PBU), equal to 27.5% of the average covered wage, but subject to a minimum eligibility period of 30 years and a normal retirement age of 65 for men and 60 for women (the amount of the PBU is increased by 1% for every additional year of contribution, up to a total of 45 years);

(ii) a compensatory pension (prestacion compensatoria or PC) for past contributions to the old system and paying a pension equal to 1.5% of average salary of the last 10 years of employment for every year of contribution to the old system (past service) with a maximum of 35 years or 52.5%; and,

(iii) the pensions paid to existing pensioners.

The public pillar is also responsible for the advanced age pension (prestacion por edad avanzada or PEA) which is paid to people over 70 who do not qualify for the PBU but have at least 10 years of contributions. The PEA is equal to 70% of the PBU or about 19% of the average covered wage. Finally, the state also pays disability and survivorship pensions in conjunction with the private pillar.

The public pillar is financed by a 16% contribution assessed on employers and by earmarked taxes and transfers from general revenues. This rate was lowered to an average of 12% during 1996 in order to promote regional employment. The last two components of the first pillar are transitory. When they will cease, the contribution rate for the first pillar will decline. The PBU may then be covered by general revenues and the contribution assessed on employers may be dropped altogether.

The Second Pillar. This has both a funded, mostly private, component and an unfunded, public component.

(i) the funded component, which is managed by AFJPs (Administradoras de Fondos de Jubilaciones y Pensiones or pension fund administrators), is a defined contribution system based on individual capitalization accounts; and

(ii) the unfunded component, which is known as PAP (prestacion addicional de permanencia or additional public pension), is a defined-benefit scheme.

The old age pension from the AFJP system is in the form of a life annuity or scheduled withdrawals based on the accumulated balance in each account. But the AFJP system also offers disability and survivorship benefits, which are of a defined-benefit nature and are covered by group disability and term life insurance. The disability and survivorship benefits of workers who switch to the AFJP system are pro-rated with the public pillar in proportion to the number of years of contribution to each pillar.

The PAP component pays 0.85% of average salary of the last 10 years of employment for every year of service to the new system. It also covers disability and survivorship benefits, similar to those offered by the private component.

The second pillar is financed by an 11% contribution rate assessed on employees. For the AFJP component this also covers the administrative expenses and insurance premiums with regard to term life and disability insurance. On average about 7.5% is used for long-term capital accumulation and 3.5% for insurance premiums and administrative expenses. The PAP component is operating on a "pay-as-you-go" basis. Its revenues are used to pay old system pensions. Future PAP pensions will be covered from future contribution revenues and budgetary transfers. Contributions are collected by the tax authority and are then distributed to the AFJPs and ANSeS (the public agency that administers the first pillar and the PAP).

Workers, including new entrants to the labor force, have the right to join either the AFJP or the PAP components of the second pillar. They also have the right to transfer their account between AFJPs up to twice a year. Workers who choose to stay with the PAP component can later on switch to the funded component. Workers who opt for the AFJP system cannot return to the PAP, although a special provision, offered after the enactment of the new law, allowed such workers to switch back to the PAP component until June 1996.

around 78%. The Herfindahl index stands at 1121 for the distribution of affiliates and 1158 for the distribution of funds. Concentration has been rising, mainly because of the mergers. The largest companies already have nearly 1 million affiliates and 1 billion pesos in assets under management.

* **Savings Mobilization.** Total contributions to the AFJP system from August 1994 to March 1997 amounted to 7.2 billion pesos. Commission charges and insurance premiums absorbed 2.3 billion pesos (about 32% of contributions), leaving 4.9 billion pesos for long-term capital accumulation. Adding investment income earned, the total funds under management by AFJPs stood at 6.2 billion pesos in March 1997 or 2.2% of GDP.

* **Asset Allocation.** In March 1997, asset allocation was 51% government bonds, 17% bank deposits, 7% corporate bonds and 23% corporate equities and mutual fund shares. The share of equity holdings has been rising, mainly at the expense of bank deposits.

* The allocation of investments by currency was 43% in peso-denominated instruments and 57% in dollar-denominated instruments in June 1995. This changed to 50/50 by June 1996. The distribution of debt instruments by maturity was 21% in less than 2 years; 40% between 2 and 4 years; and 39% over 4 years.

* **Foreign Investments.** Though permitted up to a 10% overall limit, investments in foreign securities were minuscule, probably reflecting the technical difficulties of investing overseas (rating requirements, custodial arrangements), the low level of available funds, and the high real returns obtainable in the local market.

* **Investment Returns.** Real rates of return averaged over 15% p.a., but very high commission charges reduced substantially the net real returns to individual workers. However, costs are coming down sharply as a percentage of average assets. Net real returns for a worker's full career are expected to be highly positive as long as gross investment returns continue to be strong.

* **Account Switching.** Following the Chilean prototype, there is already a large volume of account switching. One in five of active accounts are transferred annually. This is lower than in Chile, where nearly one in two active accounts are now transferred annually, but it is causing concern.

* **Operating Costs.** Excluding the amortization of deferred costs, operating costs amounted to 74% of average assets under management in fiscal 1995 but fell to 23% in fiscal 1996, mainly because of the rapid growth of assets. They fell further to 10% of average assets during the first 8 months of fiscal 1997. In the long run, costs will probably decline to less than 2% of assets. In relation to contributions, operating costs fell from 27% in fiscal 1995 to 22% in fiscal 1996 and 21% in fiscal 1997 (first 8 months).

* The 25 AFJPs spent 600 million pesos before starting operations, another 500 million pesos in the first year, an additional 600 million pesos in this second year and a further 500 million pesos in the first 8 months of fiscal 1997 (equivalent to over 700 million for a full year). The total amount of 2.2 billion pesos corresponds to 0.8% of GDP.

* **Financial results.** AFJPs were unable to recover all their operating costs in fiscal 1995, during which they suffered a heavy operating loss. Financial results improved substantially in fiscal

1996, as the cost of term life and disability insurance turned out to be much lower than originally expected and companies were able to re-allocate commission charges to a recovery of their high operating costs.

* Financial results are promising to be much improved in fiscal 1997. 11 AFJPs have already exceeded their break-even point and another 5 suffer a small operating deficit, with only 4 companies continuing to suffer large operating losses. However, the companies have still a long way to go to recoup their very high start-up costs.

* **Regulation and Supervision.** Apart from the problem caused by account transfers, there seems to be little concern right now about any adverse impact of regulation. As investment policies have been highly conservative, the various limits, and especially those on equities and foreign securities, have not been binding.

* In fiscal 1995, there was some concern that supervision had been mostly preoccupied with controlling the credentials and behavior of agents. However, growing emphasis has been placed on financial and prudential controls to ensure the safety of funds under management and thus protect the interests of affiliates. Some companies emphasize the importance of a consistent and equitable application of the regulations and sanctions as otherwise abiding companies may suffer by comparison to those which disregard the rules.

* **Policy Issues and Challenges.** The biggest and thorniest policy issues are the excessive level of costs, the marketing intensity of the system, and the high level of account switching. A detailed study of the reasons behind these features, of their implications for the future evolution of the system, and of possible solutions needs to be undertaken in cooperation with market practitioners.

* The main question to be addressed should be whether the apparently "excessive" costs are motivated by distorted incentives arising from the "draconian" regulatory regime or whether they are due to the massive effort involved in reaching, in a relatively short time, millions of workers with low balances and with no prior holding not only of mutual fund accounts but also in many cases of bank accounts.

* Another challenge is to increase effective coverage of the AFJP system and combat evasion. The Association of AFJPs could be encouraged to mount a collective publicity campaign to extol the benefits of the AFJP system and its complementarity with the public pillar, while tax incentives and more effective policing of compliance would also have to play a crucial role.

Box 2
The Pension Solidarity Law of March 1995 (Law 24463)

The Pension Solidarity Law was enacted in the midst of the Mexican crisis. As the Argentine economy faced the adverse impact of the Tequila crisis, the authorities submitted, and Congress overwhelmingly approved, a law that sought to contain the cost of the pension system.

The new law effectively stipulated that the state will pay for pensions what it can afford. The traditional indexation of pensions to wages was eliminated. All pension payments are given in nominal terms and are adjusted to inflation on an ad hoc basis through the annual budgetary process. The PBU is initially determined by its link to AMPO (the average compulsory contribution) when workers first retire, but it is subsequently adjusted to inflation on the same ad hoc basis.

The new law also imposed limits on high pensions and provided for a gradual reduction of those pensions that exceeded the stipulated limit of 3,100 pesos per month. It also established a more in relation to the average covered wage from the two pillars, which had been vetoed at the time of passage of Law 24241. This guarantee was redundant since the second pillar pension is additive to the PBU. As the PBU amounts to 27.5% of the average covered wage for a worker with 30 years of contributions, the likelihood that the second pillar will produce a pension of less than 12.5% would be very small.

Law 24463 has been challenged as unconstitutional. Its effectiveness remains to be seen. By de-indexing pensions, the new law exposes pensioners to the vagaries of inflation. Also by linking pensions to the annual budgetary process, the new law exposes public pensions to electoral pressures and considerations. Nevertheless, the pension solidarity law was a necessary measure for reducing the burdensome legacy of past pensions. Some form of indexation could be re-introduced when the mentality of hyper-inflation is eradicated. The practical effect

II. THE STRUCTURE AND PERFORMANCE OF THE AFJP SYSTEM

The private component of the new system follows the pattern of the Chilean reform, although there are some important differences. At one level, the investment rules are more liberal than those initially applied in Chile. But at another level, the provisions regarding the role of the state-owned Banco de la Nacion imply a bigger role for the state than the Chilean system. Combined with the offer of the universal basic pension (PBU) and the option to join the unfunded component of the second pillar (PAP) (for both existing workers and new entrants to the labor force), it is clear that the Argentine reform program represents a much more limited privatization of pensions than is the case in Chile.

Coverage: Affiliates and Active Contributors

Except for the military, the police, and workers covered by provincial pension systems, participation in the national integrated system is compulsory for both dependent and independent workers. This is different from Chile where only dependent workers have to join the system.

Before the launching of the new system, estimates of the proportion of workers who would opt for the AFJP system varied from 50% to as high as 70%. An important provision of the new law stated that if workers failed to express a preference for the PAP scheme, they would be presumed to join the AFJP system. This was used as a justification for the government expectation that 70% or more of workers would join the AFJP system, since inaction and inertia would favor the private component of the second pillar.[2]

But despite this presumption and despite the massive campaigns of AFJPs between April and June 1994, the pace of affiliation was initially quite slow. Only 1.8 million workers were affiliated when the system became operational at the beginning of July 1994. This represented around 20% of eligible workers (i.e. the total employed labor force less those workers covered by special schemes). The pace of affiliation accelerated after July. The number of affiliates reached 2.2 million in August 1994, 4.0 million in June 1995 1994, 5.4 million in June 1996 (Table 1). It rose further to 5.6 million by March 1997. Affiliation was encouraged by the amnesty that was announced for the second half of calendar 1995 and by the incorporation of some provincial pension schemes in the national system during 1996.

Workers affiliated to the funded pillar represent about 50% of all eligible workers and over 67% of all affiliated workers (i.e. including those who have opted for the PAP). Total affiliation to the new system reached 8 million workers in June 1996 or about 75% of all eligible workers. The share represented by the capitalization system rose from 39% in August 1994 to 57% in June 1995 and 67% in June 1996 (Table 2). However, as in Chile, there is a big discrepancy between affiliates and active contributors. Only about 50% of AFJP affiliates are active contributors and they represent less than 30% of eligible employed workers. The ratio rose in December 1995 because of the offer of fiscal amnesty, but resumed its decline by June 1996. Although the ratio of active contributors is higher for the PAP

[2] Eventually, the allocation of undecided workers was based on market shares in terms of affiliates.

Table 1

AFFILIATION AND ACTIVE CONTRIBUTORS TO AFJP AND PAP SYSTEMS

	Affiliates (000s)			Active Contributors (000s)		
	AFJP	PAP	Total*	AFJP	PAP	Total*
August 94	2242	2674	5708	1412	2150	4377
December 94	3502	2913	6602	2120	2173	4542
June 95	4021	2824	7093	2016	1916	4180
December 95	4881	2690	7738	2842	2002	5010
June 96	5363	2590	7987	2728	1642	4589

* Totals include undecided and some other minor groups of workers.

Source: Schulthess and Demarco (1996)

Table 2

AFFILIATION AND ACTIVE CONTRIBUTORS TO AFJP AND PAP SYSTEMS

	Affiliates % of total*		Active Contributors % of total*		Active Contributors % of own affiliates	
	AFJP	PAP	AFJP	PAP	AFJP	PAP
August 94	39.3	46.9	32.2	49.1	63.0	80.4
December 94	53.0	44.1	46.7	47.8	60.5	74.6
June 95	56.7	39.8	48.2	45.8	50.1	67.8
December 95	63.1	34.8	56.7	40.0	58.2	74.4
June 96	67.1	32.4	59.4	35.8	50.9	63.4

* Totals include undecided and some other minor groups of workers.

Source: Schulthess and Demarco (1996)

component, perhaps because of the older age of PAP affiliates, it has also followed a declining trend, falling from 80% in August 1994 to 63% in June 1996.[3]

It is not totally clear why there is such a wide discrepancy between the number of affiliates and active contributors. The movement of some workers in and out of the labor market (e.g. housewives, students, seasonal workers, etc) may explain part of the discrepancy, while the rise in unemployment must also be a factor. But in addition many workers may have felt the need to register (since verification of affiliation is probably easier) but not the need to maintain their contributions (where verification of compliance is probably more difficult). Another factor may have been mistakes in registration and duplicate affiliation or even multiple accounts (despite the fact that the rules impose a "one account per worker" limitation).

The extent of the discrepancy between affiliates and active contributors is a cause for some concern. This is because less than full contribution periods imply a higher likelihood of inadequate accumulation of capital and thus probably low pensions. However, to the extent that workers with interrupted careers and/or incomplete contribution records are not household heads but second income earners, the low pension in retirement may present less of a social problem.[4]

An encouraging feature of the pattern of affiliation is the young age of affiliated workers. 54% of workers who opted to join the AFJP system are less than 35 years old, 37% are between 35 and 49, and 9% are 50 or more[5]. In contrast, informal data for June 1995 show that only 36% of contributors to the PAP component are less than 35, while 27% are over 50. As expected, the age structure of the public defined benefit component of the second pillar is much older. Nevertheless, 45% of young workers (less than 35) were affiliated in the PAP component against 75% of older workers (over 50), showing that AFJPs still have a long way to go to attract the vast majority of younger workers. The transfer of many workers to the AFJP system over the past two years suggests that more young workers have now joined the AFJP system. The data confirm the expectation that younger workers were more likely to join the private pillar. At the same time, they raise some serious questions about the future finances of the PAP component of the system since its dependency ratio is likely to deteriorate sharply over the next twenty years.

---

[3] The numbers shown in Table 2 vary slightly from those quoted in Rofman and Bertin (1996). The difference is puzzling since the data come from the same source and the same agency but then it is in the nature of pension and social security data quoted in two different publications that they are almost never identical!

[4] A growing discrepancy between affiliates and active contributors should be expected in mature systems. Such a discrepancy is found even in the national provident funds of Singapore and Malaysia and should also characterize the social security systems of most countries, including that of the United States. There is a real social problem only to the extent that heads of households have short contribution periods. This is an issue that could benefit from more in-depth research.

[5] These percentages are based on those who declared their age (no age is provided by 17% of affiliates). In Chile, the 1993 age structure of affiliates was 63%, 29% and 8% for the same age groups.

Savings Mobilization

Active participants must make contributions equal to 11% of their monthly salary, up to a ceiling of 60 AMPOs. (The limit corresponds by now to 5,000 pesos per month, which is quite high in terms of the earnings distribution of Argentine workers.) Additional voluntary contributions are also allowed. Out of the compulsory contribution, AFJPs deduct the premium for term life and disability insurance and their commission fees to cover their operating expenses and profits. The average deduction by AFJPs amounts to 3.5%, leaving 7.5 % for long-term capital accumulation.

AFJPs collectively mobilized 1.88 billion pesos during the first year of operation of the new system. The first year covered 11 months of contributions since the first collections were made in August 1994. Thus, on a 12-month basis, total contributions would have exceeded 2 billion pesos, corresponding to 0.7% of GDP. At an 11% contribution rate, the total collections implied that the contribution base, i.e. the wages covered by those affiliated and contributing to the AFJP system, amounted to 18.6 billion pesos or only 6.6% of GDP.

Available estimates of the personal contributions made to the PAP in fiscal 1995 show that they amounted to 2.78 billion pesos, corresponding to a contribution base of 25.3 billion pesos. Thus, the total covered wage bill amounted to 43.9 billion pesos or only 15.7% of GDP. This is a low percentage by international standards. It may be explained by widespread evasion and perhaps also by a low labor income share in GDP.

Contributions to the AFJP system increased by 46% and reached 2.74 billion pesos in the second year. They represented 1% of GDP, while the covered wage bill amounted to 9% of GDP. Assuming that the wage bill covered by the PAP did not exceed 10% in fiscal 1996, the total covered wage bill was still less than 20% of GDP. An improvement over the first year but still very low in relation to its potential level.

In the first 9 months of fiscal 1997, contributions amounted to 2.55 billion pesos, equivalent to an annual flow of 3.5 billion pesos. The covered wage bill increased to 31.8 billion pesos or 11% of GDP. It is gradually increasing but is still low by the standards of more developed countries.

Collections from contributions fluctuated considerably from month to month (Table 3). These reflected the payment of the half-year bonus in January and July of each year, bunched payments caused by the fiscal amnesty offered employers who were late with their payments, and fluctuations in the number of active contributors.

Out of the total collections of 4.62 billion pesos of the first two years of operations, around 1.5 billion were used to cover insurance premiums and operating costs. This left over 3.1 billion pesos for long-term capital accumulation. At the end of June 1996, the total funds mobilized by the pension funds, including investment income earned, amounted to 3.84 billion pesos, corresponding to 1.4% of GDP (Table 4).

In the first 9 months of fiscal 1997, 1.75 billion pesos were accumulated for long-term purposes. Total funds under management reached 6.24 billion in March 1997.

Table 3

TOTAL CONTRIBUTION REVENUES OF AFJPs
(million pesos)

	First Year (July 1994-June 1995)		
July 1994	n.a.	January 1995	234.8
August 1994	154.4	February 1995	171.6
September 1994	169.1	March 1995	163.9
October 1994	172.1	April 1995	162.4
November 1994	154.1	May 1995	167.3
December 1994	157.4	June 1995	177.3
	Second Year (July 1995-June 1996)		
July 1995	260.0	January 1996	301.3
August 1995	221.8	February 1996	222.7
September 1995	189.0	March 1996	286.5
October 1995	186.3	April 1996	211.9
November 1995	191.0	May 1996	221.8
December 1995	232.2	June 1996	220.3
	Third Year (July 1996-March 1997)		
July 1996	346.9	January 1997	384.2
August 1996	239.4	February 1997	284.8
September 1996	248.5	March 1997	268.1
October 1996	266.9		
November 1996	256.2		
December 1996	260.6		

Source: SAFJP

Table 4

SIZE OF FUNDS

	Level bn pesos	Level % GDP	Change % GDP
December 1994	0.52	0.18	
March 1995	0.95	0.35	0.17
June 1995	1.36	0.47	0.12
September 1995	1.89	0.70	0.23
December 1995	2.50	0.91	0.21
March 1996	3.22	1.22	0.31
June 1996	3.84	1.40	0.18
September 1996	4.49	1.63	0.23
December 1996	5.33	1.91	0.28
March 1997	6.24	2.20	0.29

Source: SAFJP

Tax Treatment

According to the pension law, the tax treatment of the new system was to confer the benefit of tax deferral to its participants by making contributions deductible from income tax, exempting investment income from taxation, and subjecting pensions to tax as any other source of income. Although a compulsory pension system does not need in principle to offer any inducements to encourage participation, in practice offering tax incentives may facilitate compliance and may thus achieve a higher level of coverage. Tax incentives may also be important if other means of ensuring compliance, such as more effective policing, are not adequately developed.

One effective, less costly and perhaps also more equitable system of tax incentives could be the offer by the government of credit transfers to contributors to the system, especially to affiliates of the AFJP system. This could involve crediting to the individual capitalization accounts a small contribution from the government that would be conditional on the receipt of a monthly contribution equal to 11% of monthly income.[6] This system would benefit low income workers, including nontaxpayers, and could be designed in a way that could be much less costly than allowing tax deductibility of contributions at the marginal tax rate of each worker. It could be a means of subsidizing low income workers and offsetting the relatively higher cost of operating low income accounts. However, offering tax incentives is costly to the budget which is already under strong financial pressure. Any incentives must be considered in the context of broader tax policy.

Given the centralization of the collection of contributions in the tax collection agency, the authorities need to consider various steps, including in particular cross checking of tax returns, to promote greater compliance and reduce evasion. These measures would also be very important for ensuring the financial viability of the public pillar as evasion of contributions is a major drawback on the latter.

Another means to promote compliance, especially among low income workers, would be to use the concept of "coordinated earnings" that is applied in Switzerland. This could exempt earnings below, say, 40% of the average wage from contributing to the second pillar (Vittas 1997a, Queisser and Vittas 1997). Such an approach would probably require raising the contribution rate on the earnings that would be subject to the contributions to the second pillar. Like the co-contribution mentioned above, its introduction would need to be examined as part of broader tax and pension policy.

Benefits

The private pillar provides three related types of benefits: ordinary retirement, disability and survivorship pensions. Like its Chilean counterpart, the AFJP system combines a defined-contribution scheme for ordinary retirement pensions with defined-benefit schemes for disability and survivorship pensions. The life annuities bought at the time of retirement, or at a later stage, also take the form of defined benefits. All defined benefits are covered by appropriate insurance policies.

Ordinary Retirement Pensions. Ordinary retirement pensions from AFJPs are financed entirely from the capital accumulated in individual capitalization accounts. They are paid to affiliates reaching

---

[6] A system of government credit transfers is already in effective use in the Czech Republic and has also been proposed for Australia and Mexico. The current Australian government is, however, unlikely to implement the promise of a co-contribution that had been made by its predecessor.

retirement age (65 years for men, 60 years for women) and they complement the PBU that all workers, with the requisite contribution records, receive from the public tier of the integrated pension system (and the PC during the transition period).

The level of the old age pension depends on a number of basic parameters, such as the length of active (contributing) and passive (receiving) lives, the rate of growth of earnings and the rate of return on accumulated balances, the rate of inflation, the extent of indexation, and in particular whether pensions are set in nominal terms or are indexed to prices or wages.

Life annuities and scheduled withdrawals. Retiring workers are allowed to purchase a life annuity from a specialized retirement insurance company (which may or may not be related to the same AFJP), to make scheduled monthly withdrawals from their accounts, or to combine scheduled withdrawals with the purchase of a deferred annuity.

Life annuities will probably take the form of joint and last survivor (JLS) term certain annuities. These provide pensions first to retiring workers and then to their surviving spouses and also promise to make payments for a minimum number of years so that if workers and their spouses die early, their heirs will receive the promised payments. Life annuities transfer the longevity risk (i.e. the risk of outliving one's own savings) to the retirement insurance company. The retirement insurance company also assumes the investment risk if either a nominal or an indexed contract is used with a fixed and predetermined monthly payment in nominal or in real terms. Variable annuity contracts, on the other hand, leave the investment risk with retired workers in return for benefiting from higher returns. Annuity policies are irrevocable contracts and retired workers lose the right to transfer their account to other companies.

Scheduled withdrawals are determined each year on the basis of the remaining life expectancy of the family groups of affiliates and the rate of return of the pension fund. They are paid on a monthly basis like life annuities. Workers who opt initially for scheduled withdrawals are able to convert to a life annuity at a later stage.

The law also allows for fractional withdrawals when the account balances provide a monthly payment that is less than half of the PBU. In these cases, the monthly payment is equal to 50% of the PBU even though the account balances will be exhausted in a shorter period than the life expectancy of the account holder. AFJPs are not allowed to levy commission fees on fractional withdrawals.

Scheduled withdrawals have three advantages over life annuities: in the event of early death, remaining account balances are inherited by dependents; they allow participation in higher returns achieved by pension fund investments; and they continue to allow retired workers to transfer their balances to other AFJPs. Another potential advantage for low income workers, who as a group may tend to have a shorter life expectancy, is that they avoid the possible regressive effect on benefit payments from being included in the same annuity pool as high income workers. For their part, life annuities offer retiring workers longer-term protection against inflation and against the risk of outliving their own savings (excessive longevity), but they may be based on more conservative real rates of return and mortality tables and they may also suffer from higher commission charges. The likely use of term certain variable annuities in the longer run will reduce the gap between whole life annuities and scheduled withdrawals.

Lump Sums and Early Retirement. Workers are able to withdraw in a lump sum any balance in excess of the necessary capital to pay a pension equal to 70% of pensionable salary. The pensionable salary for the private tier is defined as the average of the monthly salary received during the five years prior to retirement. Early retirement is allowed if the balances accumulated in an individual capitalization account are sufficient to pay a pension equal to 50% of the average salary over the last five years of employment.

Disability and survivorship pensions. Disability pensions are paid to active members who are disabled under circumstances not covered by labor accident and worker compensation insurance. Disability is certified by special medical committees, set up with the approval of the supervisory agency.

Disability and survivorship pensions are financed from the balance of the individual capitalization account of the disabled or deceased affiliate, but AFJPs are obligated to make up any difference to reach the required pension. AFJPs are required to arrange one group insurance policy for all their affiliates to cover disability and survivorship pensions.

Disability pensions are defined benefits because they are set equal to 70% of the average monthly salary during the five years prior to disability, irrespective of the career earnings and contributions of workers. (A lower percentage of 50% is paid to workers with irregular contribution records). This approach may encourage older workers with accumulated balances that cannot achieve such a high replacement ratio to fake disability or even to "disable" themselves in order to receive the higher benefit. One way to weaken such incentives would be to link the disability pension from the AFJP system to the projected replacement ratio from the past record of contributions and investment performance of a worker's individual account.

Disability pensions were a contentious issue when the law was enacted because the role of the state was unclear. The problem was aggravated by the high incidence of disability pensions under the old pension system, although the creation of medical committees with clear guidelines and strict rules is expected to alleviate this problem. Since then it has been agreed that the state will be responsible for a fraction of the disability pension depending on the number of past service contributions to the old system, while AFJPs will be pay the fraction given by new service contributions.

Survivorship pensions are paid to the surviving spouse and other dependents of deceased active or passive affiliates. In the case of death of already retired workers, the pension payable to the survivors will depend on the terms of the purchased life annuity or on the remaining balance in the individual capitalization account if the deceased worker had chosen the system of scheduled withdrawals. In the case of death of an active worker, the survivorship pension will be equal to 70% of the average monthly salary during the five years prior to death. The survivorship pension will be reduced to 50% in the case of surviving spouses with dependent children with 20% for each dependent child but subject to an overall limit that survivorship pensions cannot exceed the original pension of the deceased worker.

The cost of disability and term life insurance is likely to be higher in Argentina compared to Chile. This will imply higher premiums. This is because disability insurance must make up the difference between the accumulated balance in the individual capitalization account and the technical capital needed to buy a disability pension equal to 70% of the average monthly salary of the last five years before disability. A system with a lower net contribution rate will leave a bigger gap to be covered by disability insurance. As already noted above, in Argentina, the net contribution amounts to 7.5% against 10% in Chile.

Because of the very young age of the new capitalization system, very few benefits are being paid out. Out of nearly 5,000 beneficiaries in June 1996, 4,400 were survivorship pensioners and another 400 were disability pensioners. Only 110 benefits were for ordinary retirement. However, the public pillar continued to pay various types of pension benefits to well over 3 million people. The number of beneficiaries increased to 9,200 in March 1997 with survivorship pensioners representing 7,700 or 84% of the total.

Management Companies and Market Concentration

Only specialized pension fund management companies (known as Administradoras de Fondos de Jubilaciones y Pensiones or AFJPs) are authorized to participate in the system. They must be set up as joint-stock companies and can be established by any group of shareholders, including banks and other financial institutions, large corporations, trade associations, labor unions, and groups of workers. AFJPs are regulated and supervised by a specially created agency, the Superintendencia de AFJP or SAFJP.

Apart from AFJPs, life insurance companies also play a big part in the new pension system by providing term life and disability insurance, while specialized retirement insurance companies are exclusively authorized to provide retirement life annuities. Insurance companies are regulated and supervised by the insurance supervisory agency.

AFJPs are required to have a minimum capital of 3 million pesos. They are also required to maintain an investment reserve (encaje) to meet any shortfalls in profitability. This must be equal to the larger of 3 million pesos or 2% of the total assets of the pension fund under management. Thus, to start operations, an AFJP needs a capital of 6 million pesos.[7]

Each AFJP is allowed to operate only one pension fund for all its affiliates. The pension fund is an independent entity and is fully segregated both legally and financially from the AFJP. The assets of the pension fund belong exclusively to the affiliates, are not attachable, and are not affected by any financial losses suffered by the AFJP. To protect the interests of their members, all transactions of the pension fund must be carried out at officially recognized markets where they can be effectively supervised. Furthermore, AFJPs are required to establish custody agreements with authorized custodial institutions for the safekeeping of the securities in which they invest.

The law requires the state-owned Banco de la Nacion to establish an AFJP. It was stated in the law that this AFJP should provide a guaranteed minimum rate of return (expressed in both dollar and peso terms), should not levy any commission fees, and should direct some of its pension fund assets into specified investments. However, some of these provisions have been eliminated or substantially weakened. The Government objected strongly to the provision of a dollar rate guarantee and this has been eliminated. The management of Banco de la Nacion itself was against the no-charges provision and charges are now levied. The guarantee in terms of a minimum peso rate of return (equal to the rate of interest on savings accounts) has not been dropped yet but it is likely to be watered down significantly. Some commentators have observed that it could be applied to the lifetime performance of an individual capitalization account, from its opening up to the retirement of its owner. If so, the minimum peso rate

---

7 These initial capital requirements are much higher than those imposed in Chile. Although this might discourage entry, the primary concern of the Argentine authorities is to avoid a fragmentation of the market and to help establish a robust and well regulated system. Later on, the initial capital requirements could be lowered if the authorities wish to increase the contestability of the market and strengthen the threat of potential competition from new entrants.

guarantee would become fairly innocuous. The AFJP of the Banco de la Nacion does place a significant proportion of mobilized funds in regional projects (see below).

Since the introduction of the new system in April 1994, 26 AFJPs have been authorized, though one has failed to start operations. The number of AFJPs was reduced to 22 by mergers that took place during 1995 and was reduced further to 20 in late 1996. Most of the active AFJPs are joint ventures between domestic and foreign banks and insurance companies, although some have been created by trade unions and other groups of shareholders. Domestic and foreign banks control 65% of the capital of AFJPs, followed by insurance companies that hold a further 15%. Because of the larger size of bank-controlled AFJPs, the share of banks in total funds under management is even greater at 73% (Schulthess and Demarco 1996:25-26). Of this, 36% is represented by private domestic banks, 12% by state-owned domestic banks, and 25% by foreign banks (Rofman and Bertin 1996:34).

Prior to the launching of the new pension system, prospective AFJPs engaged in considerable preparatory work, not only in developing appropriate computer systems but also in mounting extensive marketing and publicity campaigns. Particularly strong activity was focused on signing large employers and attracting high income workers.

The vigorous response of the private sector to the new pension system is underscored by the total spending in start-up costs. These amounted to an aggregate sum of over 600 million pesos (Table 5). The companies will be allowed to amortize their start-up costs over a ten-year period, up from a three-year period that was initially provided. In addition to their start-up costs, the AFJPs have collectively mobilized an additional 270 million pesos of which over 190 million pesos is in the form of equity capital. This covers both their minimum capital and investment reserves (encaje).

Table 5

DEFERRED COSTS

	Deferred Cost (mn pesos)	Affiliates July 1, 1994 (000s)	Acquisition Cost per Aff. July 1994 (pesos)	Affiliates June 1995 (000s)	Acquisition Cost per Aff. June 1995 (pesos)
Maxima	88.0	251.3	350	511.8	172
Consolidar	76.2	278.3	274	558.4	136
Previnter	54.2	99.9	543	297.0	182
Origenes	51.9	119.2	435	407.4	127
Siembra	47.6	245.4	194	519.4	92*
Nacion	44.1	150.8	292	426.8	103
Activa	41.1	58.7	700	125.1	329
Dignitas	35.7	40.5	881	--	--
All Other	175.6	522.1	336	1174.9	149
Total	614.4	1766.2	348	4020.8	153

Source: SAFJP

The most successful AFJPs are those set up by strong groups of private domestic and foreign banks. Consolidar, the largest AFJP in terms of both affiliates and funds under management, is a joint venture of Banco de Credito Argentino, Banco de Galicia, Banco Frances and Dresdner Bank. Maxima, the second largest, is a joint venture of Banco Roberts, Banco Quilmes, La Buenos Aires Insurance Company, Deutsche Bank and IFC. Siembra is a joint venture of Citicorp and Banco Rio. Nacion, the AFJP subsidiary of the state-owned largest commercial bank, is not a joint venture, although considerable technical assistance and training have been provided by Provida, the leading Chilean AFP. Origenes is a joint venture of Banco Provincia Buenos Aires, Banco Santander, Provincia Seguros and Metropolitan Life. Finally, Previnter is a joint venture of Banco Boston, AIG and Banco del Sud.

Previnter and Activa (a joint venture, among others, of Banco Mariva, the ING Group, and the Chilean AFP Habitat) had a rather disappointing start. At one point, a merger between these two firms was discussed, but this did not materialize. Instead the following four mergers have been completed so far. First, the takeover of Dignitas (a joint venture of Cigna Insurance and Omega Seguros) by Siembra. This was completed in May 1995. Second, the triple merger of Activa with Anticipar (a joint venture of the ABN-Amro group and several local institutions) and Savia (a joint venture involving Paribas and Sudamerica Compania de Seguros). Third, the merger of Jacaranda, in which the Principal insurance group from the US took a controlling management stake, with Ethika, which was already owned by the Principal group. This merger was effected in late 1996. And, finally, the further merger of Activa-Anticipar with Origenes. This has created the largest AFJP in terms of affiliates and the third largest in terms of funds. The merger reflects the strong commitment and expansion strategy of the Spanish Banco de Santander group, which also controls one of the few successful new AFPs in Chile.

The leading AFJPs are already quite large. In March 1997, Consolidar has about 850,000 affiliates and over one billion pesos under management. Origenes has over 900,000 affiliates and manages 900 million in assets. Nacion, the sixth largest in terms of affiliates and funds, has 460,000 accounts and 400 million pesos under management. In Chile, Provida has 1.5 million affiliates and the equivalent of over 5 billion US dollars under management. The leading pension fund management companies are likely to become over time major financial institutions. At the other end of the spectrum, 8 AFJPs have less than 60,000 affiliates each, while 7 AFJPs control less than 75 million pesos each.

Two of the AFJPs, Generar and Futura, appear to have adopted a clear strategy of attracting high income workers. The latter has been established by the trade union representing workers in the electricity and power sector. The average balance per affiliated worker in June 1996 amounted to over 2500 pesos for Generar and to 1800 pesos for Futura. These compare with an overall average balance of 730 pesos. Among the largest six AFJPs, Consolidar, Siembra, Maxima and Previnter had average balances of between 800 and 840 pesos, while the average balance for Nacion and Origenes was around 600 pesos.

AFJPs differ significantly in the extent to which their affiliates are active contributors. For instance, in the case of Futura, 70% of affiliates were active contributors in May 1996. Unidos, another AFJP set up by cooperatives and trade unions, had a ratio of 69%, while Generar reported a 63% ratio of active contributors. In contrast, Mas Vida and Jacaranda had active contributors that represented respectively only 29% and 36% of their affiliates. Among the six largest AFJPs, Consolidar and Previnter had ratios around 54%, Maxima and Origenes around 51%, while **Siembra** had 48% and Nacion 47%.

The relative performance of Nacion has attracted considerable interest because of the explicit and implicit government backing. As shown in Table 6, Nacion has consistently lost market share, declining

Table 6

MARKET CONCENTRATION OF AFJPs

(per cent of affiliates)

	9/94	6/95	6/96	3/97
Origenes	7.9	10.1	10.8	16.5
Consolidar	14.3	13.9	14.2	15.4
Maxima	13.1	13.4	14.0	14.9
Siembra	11.9	12.9	12.9	13.1
Previnter	5.3	7.4	8.8	9.4
Nacion	11.9	10.6	9.1	8.3
All Other	35.6	31.7	30.2	22.4
Total	100.0	100.0	100.0	100.0
Top 3	39.3	40.2	41.1	46.8
Top 6	64.4	68.3	69.8	77.6
Herfindahl Index	856	903	948	1121

(per cent of funds)

	9/94	6/95	6/96	3/97
Consolidar	16.3	15.7	16.2	16.9
Maxima	14.0	13.9	14.6	16.1
Origenes	5.4	7.6	9.3	14.4
Siembra	14.7	15.3	14.2	14.3
Previnter	7.2	8.4	9.9	10.2
Nacion	7.4	8.1	7.4	6.4
All Other	35.0	30.7	28.4	21.2
Total	100.0	100.0	100.0	100.0
Top 3	45.0	44.9	45.0	47.4
Top 6	65.0	69.3	71.6	78.8
Herfindahl Index	919	949	998	1158

Source: SAFJP

from nearly 12% of affiliates in September 1994 to 8% in March 1997. Its share of funds under management, which is much smaller than its share of affiliates because of the low average account balance, has also gone down, although less sharply.

Concentration in the market is quite high, though it is lower than in Chile. The largest 3 AFJPs accounted in June 1996 for 41% of all affiliates and 45% of total funds (Table 6). The top six had 70% of affiliates and controlled 72% of funds. At the other end of the scale, the ten smallest AFJPs accounted for less than 8% of the market. But concentration increased significantly as a result of the series of mergers. The top three AFJPs now account for 47% of both affiliates and funds, while the Herfindahl ratio rose to 1121 for affiliates and to 1158 for managed assets from well below 1000 prior to the mergers. In Chile, the 3 largest companies accounted for 68% of all affiliates in 1994 (down from 73% in 1981) and for 54% of all funds (down from 74% in 1981). The Herfindahl index was 2200 for funds under management in 1981, although it fell to 1260 by 1994.

Investment Rules

The investments of AFJPs are subject to very clear rules in order to protect the interests of their affiliates. The investment rules are guided by two basic operating principles: safety and profitability. To ensure safety, pension funds must be properly diversified and invested in approved assets, while to achieve profitability, pension funds must be allowed to seek the highest returns under these rules. In compliance with these principles, only maximum limits are imposed on investments.

Approved assets include securities that are traded on organized exchanges or issued by well regulated and supervised entities, such as banks. Both debt and equity securities of private issuers require proper risk rating from a rating agency. This requirement impedes investment in foreign equities that are not rated and in mutual funds that hold any type of nonrated instruments. Although they aim to protect pension funds from investments in exotic risky securities, they also impede international diversification (Ciampi 1997).

The law specifies maximum limits but authorizes the central bank, the CNV and the new supervisory agency to issue regulations that could impose lower limits. It also authorizes the same bodies to issue regulations placing limits on investments in the securities of individual issuers. Investments in privatized companies are encouraged but no attempt is made to promote the dispersion of ownership of Argentine companies, though the individual company limits may contain provisions to that effect.

The investment rules specify limits for some subclasses of instruments (e.g. convertible bonds or securities of privatized companies) but looking at major classes of investments, the rules contained in the law (the lower limits, if any, imposed by subsequent regulations are shown in parentheses) limit investments in federal securities to 50% (50%) of a fund's total assets, 30% (15%) in provincial and municipal securities, 30% (28%) in bank deposits, 40% (28%) in mortgage bonds or mortgage-backed securities, 40% (28%) in corporate debt of various types, 50% (35%) in corporate equities, 20% (14%) in shares of mutual funds, 10% in direct investment funds, 10% (2%) in futures and options contracts, and 10% in foreign securities (Table 7).

Pension funds are prohibited from investing in the shares of AFJPs, insurance and risk rating companies. The prohibition of investments in AFJPs aims to avoid undue concentration in the industry, while in the case of insurance companies, it aims to avoid potential conflicts of interest given the contractual and common ownership ties between insurance companies and AFJPs. Moreover, because

Table 7

INVESTMENT LIMITS PER INSTRUMENT
(% of value of fund)

		Law		Reg	
a.	Federal state securities		50%		50%
b.	Provincial and municipal securities		30%		15%
	Corporate debt (c+d+e+f)		40%		28%
c.	Long-term corporate debt	40%		28%	
d.	Short-term corporate debt	20%		14%	
e.	Convertible corporate bonds	40%		28%	
f.	Convertible bonds of privatized companies	20%		14%	
g.	Fixed term bank deposits		30%		28%
	Argentine equities (h+i)		50%		35%
h.	Equities of Argentine companies	50%		35%	
i.	Equities of privatized companies	20%		14%	
j.	Shares of closed and open mutual funds		20%		14%
	Foreign securities (k+l)		10%		10%
k.	Foreign government bonds	10%		10%	
l.	Foreign corporate bonds and equities	10%		7%	
m.	Futures and options contracts		10%		2%
n.	Mortgage bonds or mortgage-backed securities	40%		28%	
o.	Shares of direct investment funds		10%		10%
p.	Regional projects		30%		50% max 20% min*

* Only applies to investments of Nacion.

Source: SAFJP

insurance companies and AFJPs will engage in similar activities, such investments would not provide adequate diversification of risk. Investments in risk rating companies are prohibited in order to avoid potential conflicts of interest. To avoid self dealing and misuse of privileged information, AFJPs are also not allowed to invest in securities issued by related companies.

The investment limits are more liberal than those originally applied in Chile, although the more detailed regulations that have been issued since the passing of the law have imposed a somewhat more restrictive regime. In Chile, initial investment rules imposed a 100% limit for state securities, 80% for mortgage bonds, 70% for bank liabilities, 60% for corporate bonds, and 20% for quotas of pension funds[8]. No investments in corporate equities or foreign securities were allowed in the initial stages of the Chilean scheme.

Nevertheless, the investment rules are still quite restrictive and deviate from practice in Anglo-American countries where fund managers are subject to the prudent man rule and are otherwise free from detailed investment guidelines. But in the context of the experience of developing countries, the absence of strong and transparent capital markets, the compulsory nature of the pension system, and the lack of familiarity of pension members with capital market investments, the detailed investment rules appear justified, provided they are revised in a flexible and timely manner to take account of the growing maturity of the system, the greater professionalism of investment managers, and the modernization of the capital markets.

Asset Allocation

The investment policies of the AFJPs have generally been quite conservative. In June 1995, the main investments included government bonds which accounted for 46% of total funds and bank deposits which represented an additional 27%. Most other investments were quite low and well within their limits. Particularly low were holdings of equities (including mutual funds) as well as investments overseas (Table 8).

Since then, AFJPs increased their holdings of equities which, together with mutual fund shares, came to represent 15% of total assets in June 1996, up from 6% in the first year. The main reduction occurred in holdings of bank deposits which fell from 27% of assets to 18%. Foreign securities also declined from 3% to 0.5%. About 2% was invested in cash, while regional projects absorbed a declining share and amounted to 2.3% of funds in June 1996.

In March 1997, equity and mutual fund investments rose to 23% of total funds. Holdings of government bonds amounted to 48%, bonds of other state bodies to 4%, bank deposits to 14%, corporate bonds to 5%, and cash holdings to 3%. Overseas securities were a negligible fraction of the total.

---

[8] In Chile, the provision for investments in the quotas or units of other pension funds aimed to enable small AFPs to benefit from the professional investment management skills of the larger AFPs. It was meant to encourage new entry into the AFP system and stimulate greater competition, though no AFP made use of this rule. The provision is not included in the Argentine law where the required minimum capital and investment reserve for new entry are much higher than in Chile.

In June 1995, 43% of all investments were in peso-denominated and 57% in dollar-denominated, mostly locally issued, instruments. A year later peso denominated instruments accounted for 50% of total assets, reflecting to a large extent the growth of equity holdings.

In terms of the maturity structure of debt instruments, 21% were for less than two years, 40% were for between two and four years, and 39% were for over four years. The long-term bonds were government bonds that are carried at cost rather than market values. AFJPs are allowed to hold up to half their portfolio of government bonds in issues that they are committed to hold to redemption. These bonds can be reported at acquisition cost but with a gradual write-down or write-up of their value to their redemption price as individual issues approach their maturity date.

Investment Returns

Pension funds are valued daily at market prices and AFJPs are subject to minimum relative return requirements for the pension fund under their management. These are set in relation to the average performance of all pension funds over any twelve-month period and aim to protect affiliates from excessive fluctuations in returns and from wide dispersion between different AFJPs. The limits are expressed in nominal terms, in contrast to Chile where they are set in real terms. This may weaken considerably the protection of affiliates in case of high inflation, since the fluctuation in real returns will be much greater when inflation is higher.

The minimum requirement stipulates that if the investment return is less than 70% of the average of all pension funds, or if it is lower than the average by 2 percentage points (whichever yields the lower rate of return), the AFJP will be required to make up the difference, first by transferring funds from the profitability fluctuation reserve (if such a reserve has been established) and, if this is inadequate, from its investment reserve. Similarly, if the investment return is 30% higher than the average for all pension funds, or exceeds the average by 2 percentage points (whichever yields the higher rate of return), the AFJP will be required to place the difference in a profitability fluctuation reserve. This reserve will not belong to the AFJP, but will be an asset of the pension fund. Failure to make up a shortfall in profitability will cause the liquidation of the AFJP concerned and the transfer of accounts to other AFJPs.

The conservative investment approach of AFJPs during the first months of operation of the new system has been vindicated by the financial crisis that was triggered by the large devaluation of the Mexican peso in December 1994. Despite fluctuations during the year, the average nominal rate of return for the industry as a whole amounted to 13% in the first year of operation. With inflation running at 2.7%, this implied a 10% real rate of return. There was considerable variation in the nominal returns of individual AFJPs. The highest return amounted to 20% and the lowest to 5.4% (Table 9). The fluctuation reserve was activated for one company with returns in excess of the upper limit, while four companies with returns below the lower limit were required to make up from their own encaje the shortfall up to that level.

Investment returns were much higher during the second year of operation as the economy started to recover and real interest rates declined. Declines in interest rates give rise to substantial capital gains in holdings of government bonds and this may have contributed to the higher returns in fiscal 1996. The average return amounted to 23%, while no fund was outside the relative profitability norms. For the two years combined, the average nominal return reached 18%, which translates into a 15% real return. This impressive performance is of course explained by the very high level of real interest rates in Argentina, a result of the economic crisis and the high risk premium facing the Argentine economy.

Table 8

ASSET ALLOCATION

(% of total)

	6/95	6/96	3/97
Government bonds (at cost)	24.4	24.1	25.1
Government bonds (market)	21.6	23.3	22.7
Total government bonds	46.0	47.4	47.8
Other public bonds (at cost)	3.1	1.8	1.0
Other public bonds (market)	2.4	2.6	2.7
Total other public bonds	5.5	4.4	3.7
Long term corporate bonds	3.4	5.8	4.8
Short term corporate bonds	3.4	4.9	2.0
Total corporate bonds	6.8	10.7	6.8
Fixed term bank CDs	27.1	17.6	13.9
Equities privatized companies	1.1	2.1	2.4
Other equities	0.9	11.4	17.6
Total equities	2.0	13.5	20.0
Closed mutual funds		0.1	
Open mutual funds	4.2	1.4	2.7
Total mutual funds	4.2	1.5	2.7
Foreign gvt securities	1.4	0.2	
Other foreign securities	1.5	0.3	0.5
Total foreign securities	2.9	0.5	0.5
Regional projects (Nacion)	3.4	2.3	1.3
Cash	2.2	2.3	2.7
Grand total	100.0	100.0	100.0
Peso denominated	42.6	50.1	50.3
Foreign currency denominated	57.4	49.9	49.7

Source: SAFJP

Table 9

INVESTMENT PERFORMANCE OF AFJPs, July 1994-June 1996
(Nominal annual rate of return on pension fund assets)

	First Year		Second Year		Whole Period	
	%	Rank	%	Rank	%	Rank
Prorenta	14.1	(5)	25.66	(1)	20.67	(1)
Mas Vida	20.0	(1)	17.43	(22)	19.58	(2)
Origenes	13.8	(6)	23.55	(5)	19.46	(3)
Activa-Anticipar	15.6	(2)	20.89	(11)	19.09	(4)
Maxima	10.9	(14)	24.56	(3)	18.39	(5)
Jacaranda	14.8	(4)	20.30	(16)	18.35	(6)
Consolidar	10.3	(16)	23.65	(4)	18.17	(7)
Ethika	10.9	(13)	20.83	(12)	18.17	(8)
Fecunda	15.3	(3)	19.42	(19)	18.14	(9)
Previnter	11.6	(10)	22.81	(8)	17.85	(10)
Siembra	10.0	(17)	23.51	(6)	17.69	(11)
Unidos	8.7	(19)	25.66	(2)	17.69	(12)
Arauca	13.3	(7)	19.99	(17)	17.38	(13)
Claridad	12.8	(8)	20.46	(14)	17.36	(14)
Previsol	11.0	(12)	22.02	(9)	17.18	(15)
Generar	11.0	(11)	20.48	(13)	16.38	(16)
Nacion	12.1	(9)	19.22	(20)	16.31	(17)
Profesion	10.8	(15)	19.69	(18)	15.89	(18)
Futura	9.6	(18)	20.42	(15)	15.60	(19)
San Jose	5.4	(22)	22.93	(7)	14.46	(20)
Afianzar	5.7	(21)	21.43	(10)	13.92	(21)
Patrimonio	7.9	(20)	18.35	(21)	13.63	(22)
All AFJPs	13.0		22.83		17.74	

Source: SAFJP

It is interesting to note that, among the large AFJPs, Maxima and Consolidar rank respectively 5th and 7th in terms of total return over the first two years, Previnter and Siembra are in 10th and 11th place, while Nacion is 17th. Of the six largest, only Origenes is among the top three performers. Rather surprisingly, Generar and Futura, the two funds with highest individual account balances, report low total returns, ranking respectively in 16th and 19th place. In contrast, small and medium-sized AFJPs, such as Prorenta, Mas Vida, Activa-Anticipar and Jacaranda, report high rates of return.

Operating and Insurance Costs

AFJPs charge an average of 3.5% for operating costs and insurance premiums. Commission rates were adjusted slightly during the first 24 months of operation. In June 1996, they ranged from a variable fee of 2.3% to 3.5% plus a fixed monthly fee per collection ranging from 0 pesos (7 companies) to 5 pesos (2 companies) and 8 pesos (1 company). Commission fees are subject to similar regulations as in Chile. No exit fees and asset management fees are permitted. The companies can charge a flat and a variable fee per collection as well as an entry fee. They can also charge a fee per scheduled withdrawal. Unlike in Chile, AFJPs are allowed to offer loyalty bonuses, though their impact in discouraging transfers seems to have been very limited.

The allocation of commission charges between insurance premiums and operating costs has varied considerably across companies and over time within each company. It appears to be somewhat arbitrary and may also be influenced by tax considerations. In general, insurance premiums were set at relatively high levels at the beginning of the period, but premiums were later adjusted downwards as the loss experience was better than expected. At the beginning, companies allocated between 1.6% and 2.4% for insurance premiums but the insurance allocation was much lower in later months. The average allocation in the first year amounted to 46% of commission revenues or 1.6% out of the total of 3.5%. In the second year, the average allocation was reduced to 26% of commission revenues or 0.91% of covered salary. In the first 8 months of fiscal 1997 (i.e. up to and including February 1997), the insurance allocation declined further to 22% of revenues.

Total commission fees charged on affiliates have not been reduced but a greater proportion has been used to recover the high operating and start-up costs. This explains the vast improvement in the operating results that AFJPs reported as a whole in fiscal 1996 (see below). Operating costs (excluding insurance charges and the amortization of deferred costs) amounted to an incredible 74% of average assets under management in fiscal 1995 but fell to 23% in fiscal 1996 as a result of the rapid accumulation of assets. They declined further to 10% of average assets during the first 8 months of fiscal 1997. These proportions are clearly very high by comparison to the levels found in countries with mature pension fund systems but they will decline over time as assets continue to accumulate. Operating costs declined as a proportion of contributions from 27% in fiscal 1995 to 22% un fiscal 1996 and 21% in fiscal 1997 (first 8 months). In Chile, the operating costs fell from 14% of assets in the second year of operation of the Chilean system to less than 2% at present.

The 25 AFJPs spent 600 million pesos before starting operations, another 500 million pesos in the first year and an additional 600 million pesos in this second year, resulting in a total amount of over 1.8 billion pesos. Another 500 million pesos was spent during the first 8 months of fiscal 1997, equivalent to an annual amount of 750 million pesos. The total of 2.2 billion amounts to about 0.8% of GDP.

About 55% of operating costs are absorbed by salaries and other staff costs, 20% by marketing costs (other than salaries) and another 20% by system and other administration costs. Allowing for the fact that over 60% of staff costs are incurred for staff engaging in selling and marketing, the total marketing costs account for over half of all operating costs--a confirmation of the marketing challenge facing AFJPs and of the marketing intensity of the new system. AFJPs did not charge affiliates fully for all their operating costs. In fiscal 1995, non-insurance fees charged on affiliates amounted to 46% of average funds. This fell to 24% in fiscal 1996 and to 11% during the first 8 months of fiscal 1997..

The amount of commission fees used to cover operating costs rose from 1.9% to 2.5% of covered salary in the second year and increased further to 2.8% in fiscal 1997. This represents an increase from 25% to 33% to 37% of the new amounts invested in the fund. Despite the achievement of reasonable real rates of return by the pension funds, individual workers with full contribution records since the beginning of the new system suffered highly negative net real rates of return in their accounts in fiscal 1995 and 1996, although they will probably earn a positive net real return in fiscal 1997. Over the long run, operating costs should come down to more reasonable levels as assets continue to accumulate and annual contributions will represent a declining fraction of total balances in individual accounts. On a cumulative, lifetime basis, workers will likely earn highly positive real rates of return, unless gross investment returns decline and remain at very low levels.

This is in line with the Chilean experience and reflects the very high start-up and initial marketing costs. The levying of commission fees on the flow of contributions rather than on assets may exacerbate this problem, though only if AFJPs would have been prepared to absorb a bigger part of operating costs in the first few years of the scheme. Otherwise, the level of asset fees could have been set at a sufficiently high level to achieve the same amount of cost recovery.

The issue of whether the high marketing and operating costs of the new pension system are due to its regulatory framework, in particular the use of specialized management companies, is a wider issue that has been raised in the context of Chile and other Latin American countries (Shah 1996). Although it is argued that allowing commercial banks, insurance companies and mutual funds to manage pension accounts might have resulted in lower costs, such an outcome was unlikely to occur because of the weak financial position of most Argentine banks and insurance companies and the underdevelopment of the mutual fund sector.

Another explanation attributes the high marketing costs to the "one price" rule, which implies the imposition of unduly high fees on high income workers. According to this view, both the marketing intensity and the use of agents to induce workers to switch their accounts are a means of rebating to high income workers the excessive amount of fees (Valdes-Prieto 1994, Arrau et al 1993). Relaxing the "one-price" rule, allowing discounts for high balance workers and for groups of workers, and introducing subsidies for low income workers could help mitigate this problem. Another possibility is to impose limits on commission fees, marketing campaigns and the use of selling agents, although this should be considered as a last resort measure, if every other solution were to fail to contain operating costs.

Account Switching

As in Chile, the right to change management company is an essential element of the new system. However, strong competition among AFJPs and aggressive use of selling agents, combined with lack of familiarity by workers as well as absence of a reliable track record, have given rise to numerous transfers of accounts that are characterized by an unclear pattern. During the first six months of calendar 1995, 142,000 accounts were transferred among AFJPs. This corresponded to about 7% of active accounts or 14% on an annual basis. Account switching increased to 242,000 in the second semester of 1995 and the same level was also observed in the first half of calendar 1996. The increase in the second semester of 1995 was caused in part by the decision to allocate on a proportional basis the undecided accounts. Thus, the level observed in the first half of 1996 effectively represents a continuing upward trend in the number of account transfers, although some of it may reflect the reaction of affiliates to the allocation decision of the authorities. For the whole of 1996, transfers (including the allocation of undecided ones) involved 484,000 accounts, representing nearly 20% of active accounts. Although still much lower than in Chile, this level of account switching is considered too high and various measures are being discussed to try to contain over-frequent account transfers. The level of account transfers appears to have continued unabated in fiscal 1997.

Among AFJPs, the pattern of net gainers and net losers has changed over time (Table 10). Over the whole period, the main gainer was Previnter with a net increase of 55,000 accounts followed by Origenes with 45,000. However, in the first semester of 1996, Maxima was the net gainer in terms of account transfers with a net inflow of 18,000 accounts, followed by Previnter with 15,000. Most of the other AFJPs had net gains or losses within plus or minus 7,000, except for Nacion, which suffered a net loss of 19,000 affiliates. Nacion suffered a cumulative net loss from account switching of nearly 40,000 accounts. Nevertheless, because of the affiliation of new workers, the total number of its affiliates increased by nearly 500,000 during this period. Rather surprisingly, Siembra, the AFJP subsidiary of Banco Rio and Citibank, also suffered a net cumulative loss of 20,000 accounts.

A study by SAFJP found that the main determinants of net gains in account switching were the number of selling agents (promotores) and the level of spending on marketing and selling. The investment return appeared to play an important role only in the first semester of 1996, while the level of flat fees seemed also to have an effect. However, the average level of commission charges played a minor role as did the size of the AFJP (Grushka and De Biase 1996).

Table 10

PATTERN OF ACCOUNT SWITCHING
(000s)
Six Months Ending in

	Jun 95		Dec 95		Jun 96	
	Inflows	Net	Inflows	Net	Inflows	Net
Consolidar	15.3	+ 1.3	34.3	+ 8.1	31.6	+ 3.9
Maxima	10.3	- 18.8	32.3	+ 0.4	43.3	+ 18.3
Siembra	11.1	- 9.7	20.8	- 7.7	25.8	- 3.5
Origenes	24.5	+19.2	36.3	+22.2	23.6	+ 4.6
Nacion	9.5	- 7.8	14.6	- 10.7	11.3	- 18.7
Previnter	27.6	+18.6	40.6	+22.3	39.8	+ 15.1
All Other	43.3	+ 2.8	62.9	- 34.6	66.2	- 19.7
Total	141.9	0	241.8	0	241.6	0

Source: SAFJP

The transfer of accounts is giving rise to disputes among AFJPs. There are allegations of manipulation and exploitation of unsophisticated workers, even of forgeries and other types of fraud. Some companies are in favor of using a carta documento whereby workers will have to visit a post office, sign a declaration that they want to transfer their account and send it to the companies concerned through the post. Under this system, the companies would incur all the additional costs involved. However, companies with low market shares, and especially those with market shares that are below their targeted levels, are opposed to these or any other measures that would inhibit the right of workers to transfer their accounts. Other commentators have proposed placing limits on the level and structure of commissions paid to agents, while there are also some proposals to require agents who change AFJPs to refrain from taking customer accounts with them. It is claimed that one of the reasons for the high mobility of accounts in Chile is the high mobility of selling agents.

The importance of selling agents is underscored by the very large number used during the sign-up period between April and June 1994 when almost 50,000 agents were used. This number was inflated by the very large number of agents hired by Banco de la Nacion (17,000). The number of agents fell substantially after the completion of the very intensive initial campaigns. It fell to 17,400 in December 1994 and 11,800 in June 1995. The total number grew subsequently to 14,800 in June 1996 and 18,400 in December 1996.

Financial Results of AFJPs

One of the most interesting aspects of the Argentine pension reform was the vigorous response of the private sector. This was exemplified by the aggressive spending in start-up costs, both for system development and marketing campaigns.

The AFJPs suffered a heavy operating loss in fiscal 1995 of no less than 180 million pesos. This was converted into an operating profit of nearly 50 million pesos in fiscal 1996 (Table 11). This was a major turnaround, that is mostly explained by the lower cost of disability and term life insurance, the retention of a higher proportion of commission revenues for cost recovery, and by the continuing rise in affiliation and accumulated balances, although several AFJPs also achieved some improvement in productivity and cost efficiency.

Financial results are likely to be much improved in fiscal 1997. 11 AFJPs have already exceeded their break-even point and another 5 suffer a small operating deficit, with only 4 companies continuing to suffer large operating losses. However, the companies have still a long way to go to recoup their very high start-up costs. The importance of scale is underlined by the fact that it is the largest AFJPs that report a positive operating and overall financial result. However, the most successful company seems to be Generar, a smaller AFJP, which focuses on high balance workers.

Regulation and Supervision

In a mandatory retirement savings scheme, the state has a clear responsibility to ensure that the system is safe and transparent and is able to provide adequate long-term benefits. For this reason, AFJPs are subject to very detailed rules and regulations regarding their investment policies and their fiduciary responsibilities toward their affiliates.

Table 11
FINANCIAL RESULTS OF AFJPS
(million pesos)

	First Year	Second Year	Third Year (8 months)
Commissions	+587	+844	+680
Other revenues	+ 6	+ 16	+ 18
Total operating revenues	+593	+861	+798
Insurance premiums	-272	-218	-149
Operating costs	-500	-596	-490
Total operating costs	-772	-814	-639
Operating result	-179	+47	+ 59
Other costs (net) *	- 37	-62	- 38
Investment income (net) **	- 4	+ 10	+ 12
Net result	-220	- 5	+ 33
Taxes and extraordinary items	- 2	- 6	- 1
Net overall result	-222	-11	+ 32
Non-Insurance Charges ***	315	626	531
Year-End Assets (bn pesos)	1.36	3.84	6.05
Average Assets (bn pesos) ****	0.68	2.60	4.95
Insurance premiums/commissions	46%	26%	22%
Operating costs/year end assets	37%	16%	8%
Operating costs/average assets	74%	23%	10%
Non-insurance charges/average assets	46%	24%	11%
Operating Costs/Contribution Revenues	27%	22%	21%

* mainly covers amortization of deferred costs
** net of monetary correction
*** non-insurance charges are given by total commission fees less the amount allocated for insurance premiums
**** average assets are the average of balances at the beginning and end of each year

Source: SAFJP

AFJPs are subject to rigorous information disclosure requirements. They are required to report daily to the supervisory agency their investment transactions and to submit monthly reports on their financial position and overall performance. They are also required to provide regular statements (at least three times a year) to their affiliates disclosing the last four monthly contributions, the commissions and premiums deducted from the account, the financial performance of the pension fund and the accumulated quotas and balance as well as the rate of return on their individual account, and information on the average performance and commissions charged by all AFJPs. AFJPs also have to maintain a list in their offices containing information on the names of directors and managers, their last balance sheet, the size of the fund under management, the profitability fluctuation and investment reserves, the price of each quota, the structure and level of commissions charged, and the composition of its investment portfolio.

The AFJPs are supervised and controlled by the Superintendency of AFJPs (SAFJP). This is an autonomous agency linked to the Ministry of Labor and Social Security. The SAFJP is responsible for authorizing and revoking the license of AFJPs, for interpreting the law and issuing detailed regulations for the efficient functioning of the system, and for promoting changes in the law as necessary.

The SAFJP has a major responsibility in supervising the operations and investments of AFJPs. It requires the submission of detailed reports on investment transactions and the financial position of both the pension fund and the AFJP, reviews the insurance contracts used by the AFJPs with regard to the offer of disability and survivorship pensions, and ensures that AFJPs credit contributions received to members' accounts and pay promptly the pension benefits due. It also controls the operation of the profitability fluctuation reserve funds and the investment reserves of AFJPs. It has the right to impose fines and is empowered to intervene and supervise the liquidation of AFJPs that fail to maintain adequate investment reserves or to comply with regulations for the custody of investment documents.

During the first year of operation of the new system, the authorities appear to have placed primary emphasis on controlling the credentials and probity of selling agents. However, there is already growing emphasis on financial and prudential controls to ensure the safety of funds under management and thus protect the interests of affiliates. A stricter approach is followed on the imposition of penalties for violations of the regulations, while use of the encaje has been activated in the case of companies with insufficient relative returns. Some companies emphasize the importance of a consistent and equitable application of the regulations and sanctions as otherwise abiding companies may suffer by comparison to those who disregard the rules.

As in Chile, the state also guarantees the minimum profitability of pension funds. If an AFJP is unable to make up a shortfall in the rate of return from its profitability fluctuation and investment reserves, it will be forced into liquidation. The state will then make up the shortfall in profitability and the balances of individual capitalization accounts will be transferred to other AFJPs. The state also guarantees the annuity payments for old age pensions as well as for disability and survivorship pensions of failed insurance companies, subject to a maximum limit of 5 times PBU.

III. OVERALL EVALUATION AND CONCLUDING REMARKS

The AFJP system has been launched successfully and has benefitted from a vigorous response by the private sector. As the system is extensively based on the Chilean prototype it shares many of its strengths and weaknesses. But the two systems are not identical twins. There are many similarities but there are also some significant differences.

Comparison with Chile

In both countries, only specialized companies are authorized to manage pension accounts, there is the "one account per worker, one fund per company" limitation, workers have the right to change management companies, companies are required to treat all their affiliates equally (this implies uniform charging schedules and one group policy for term life and disability insurance). Although the Argentine AFJPs are allowed to offer loyalty discounts, they are prevented from offering group discounts or to charge lower fees to high balance workers. Companies are free to fix the level of their charges but their investments are subject to regulations and tight supervision to ensure diversification and safety, but without direction of investments. Also, the retirement benefits of the private tier are broadly similar.

Pension funds in both companies achieved remarkable investment returns, benefitting from high real rates of interest and generally rising stock markets. But their operating costs have been very high in both countries, probably reflecting very high start-up and marketing costs. Both systems have exhibited, indeed have suffered, from intense and expensive marketing campaigns. This has given rise to unexpectedly high levels of account switching.

The excessive level of costs implied weak initial financial results for the management companies and negative net real rates of return for affiliates. In the long run, however, net real rates of return to affiliates are expected to be highly positive in both countries, while successful management companies may attain high levels of profitability and returns to equity.

Both countries suffer from high, though tolerable, levels of market concentration and from uniform investment portfolios. Both features have been attributed to the impact of the draconian regulations that have been applied with regard to the structure of the industry and its investment policies.

The differences come in five main areas. First, in Chile only workers in dependent employment are mandated to participate in the system and new workers have no choice to join an unfunded public pillar. In contrast, in Argentina, the mandate also applies to self-employed workers, while new workers continue to have the right to join the unfunded PAP system.

Second, in terms of long-term savings mobilization, the Chilean scheme uses 10% for long-term capital accumulation against only about 7.5% in Argentina. Thus, the relative role of the private pension funds in the capital market will be significantly greater in Chile.

Third, the cost of term life and disability insurance is likely to be higher in Argentina, again because a smaller amount is used for long-term capital accumulation. Insurance companies will have to make up a bigger shortfall between the accumulated balance and the required capital for purchasing the survivorship or disability annuity.

Fourth, in Argentina, the minimum relative profitability returns are expressed in nominal terms, in Chile in real terms. Perhaps for this reason, in Argentina the margin is set at 30% higher or lower than the average return, whereas in Chile it is set at 50%. However, using nominal returns provides weaker protection to workers in times of high inflation.

Fifth, investment rules are more liberal in Argentina, where from the start higher limits for investments in equities have been allowed as well as some investments in foreign securities. In practice, however, these have been of little relevance as the AFJPs have followed very conservative investment policies and have stayed well within the permitted limits. In the longer run, however, a more liberal approach would be appropriate. The Chilean system has already benefitted from considerable relaxation of investment rules, although a further and faster relaxation is advisable.

Despite the differences in the rate of long-term capital accumulation, both systems are contributing to the accumulation of long-term financial resources and are having a major impact on the development and modernization of the capital market.

They are also stimulating the development of the insurance industry. A significant volume of premiums is paid over to insurance companies to cover term life and disability insurance as well as for the purchase of annuities. The insurance industry is adopting more modern techniques for assessing losses and handling claims as well as for setting and investing reserves and is linking up with foreign companies (including reinsurance companies) that facilitate the transfer of the required technology.

Policy Issues

The biggest and thorniest policy issue is the excessive level of costs, the marketing intensity of the system, and the high level of account switching. A detailed study of the reasons behind these features, of their implications for the future evolution of the system, and of possible solutions needs to be undertaken in cooperation with market practitioners. The main question to be addressed is whether the apparently "excessive" costs are motivated by distorted incentives arising from the "draconian" regulatory regime or whether the high costs are due to the massive acquisition effort in attracting and opening accounts for 6 million accounts (and maintaining active accounts for nearly 3 million of them) in a country where holding of mutual fund accounts was virtually non-existent before the pension reform and where even bank account holding among the lower income groups was not that prevalent.

The study should also examine in detail the impact of the various "draconian" regulations that have been applied so far, such as the "one account per worker, one fund per company" rule, the no discrimination rule, the detailed investment rules, the minimum profitability requirement, and even the reliance on specialized management companies. The study could also examine the case for restricting the frequency of account switching, for putting limits on the remuneration of selling agents, and perhaps also for putting limits on commission charges levied on affiliates.

The study could further consider the case for relaxing some of the more "draconian" of these rules, although in revising different rules, the first priority should be to ensure that the system remains safe, simple and transparent. Needless to add, the authorities should continue to engage in an informed and fruitful dialogue with market practitioners to ensure that regulations and supervision remain market-friendly and that changes in rules are adopted in order to streamline the operation of the system and enhance its attractiveness to workers.

Another challenge of major importance is to increase coverage of the AFJP system. A campaign for this purpose should be coordinated with a campaign to reduce evasion from the public pillar. Tax incentives could play an important part in making participation in the AFJP system more attractive, although their implications for the budget would also have to be assessed.

Finally, the Association of AFJPs could be encouraged to mount a collective publicity campaign to extol the benefits of the AFJP system and its complementarity with the PBU from the public pillar. Such a campaign could pave the way for fundamental changes in the role and structure of the PAP component of the second pillar. A collective campaign may be advisable, given that the advertising campaigns of individual AFJPs tend to emphasize reasons for joining one or the other company but without underscoring the benefits of the private tier[9].

---

[9] Individual AFJPs go to remarkable lengths to highlight their record of achievement compared to other companies. Thus, in the first year of operation when there were no records of investment performance or service standards, some AFJPs have drawn attention to the number of affiliates per dollar of acquisition cost, per inch of newspaper advertising space, and per second of television advertising, as measures of their higher efficiency and thus reasons for joining them rather than their competitors.

References

Arrau, Patricio, Salvador Valdes-Prieto and Klaus Schmidt-Hebbel. 1993. *Privately Managed Pension Systems: Design Issues and the Chilean Experience,* mimeo. Washington, D.C.: The World Bank.

Bertin, Hugo D. and Andrea M. Perrotto. 1996. *El Valor Agregado del Sistema de Capitalizacion Individual.* Buenos Aires: SAFJP.

Ciampi, Tom. 1997. "*Diversification sputtering: Argentina panel cramps international investing efforts*". Pensions and Investments, Chicago, Ill. January 6, 1997.

Cottani, Joachin and Gustavo Demarco. 1996. *The Shift to a Funded Social Security System: The Case of Argentina.* NBER, Privatizing Social Security Conference. Cambridge, Mass: National Bureau of Economic Research.

Grushka Carlos and Marcelo De Biase. 1996. *La Movilidad de los Affiliados a las AFJP: Hypothesis* y *Evidencia.* Buenos Aires: SAFJP.

Queisser, Monika and Dimitri Vittas. 1997. *The Swiss Pension System.* Financial Sector Development Department, mimeo. Washington, D.C.: The World Bank.

Rofman, Rafael. 1996. *Evolucion, Componentes y Efectos de las Comisiones del Regimen de Capitalizacion.* Buenos Aires: SAFJP.

Rofman, Rafael and Hugo Bertin. 1996. *Lessons from Pension Reform: The Argentine Case.* EDI Conference on Pension Systems: From Crisis to Reform. Washington D.C.: Economic Development Institute,.

Rofman Rafael and Gustavo Stirparo. 1996. *Proyeccion del Tamano de los Fondos de Jubilaciones y Pensiones.* Buenos Aires: SAFJP.

Schulthess, Walter and Gustavo Demarco. 1996. *El Sistema de Jubilaciones y Pensiones de Argentina a Dos Anos de la Reforma.* Buenos Aires: SAFJP.

Shah, Hemant. 1996. *Towards Better Regulation of Private Pension Funds.* EDI Conference on Pension Systems: From Crisis to Reform. Washington D.C.: Economic Development Institute,.

Valdes-Prieto, Salvador. 1994. *Earnings-Related Mandatory Pensions: Concepts for Design.* Policy Research Working Paper 1296. Washington, D.C.: The World Bank.

Vittas, Dimitri. 1997a. *The Argentine Pension Reform and its Relevance for Eastern Europe.* Financial Sector Development Department, mimeo. Washington D.C: The World Bank.

Vittas, Dimitri. 1997b. *Strengths and Weaknesses of the Chilean Pension Reform.* Financial Sector Development Department, mimeo. Washington D.C: The World Bank.

Policy Research Working Paper Series

	Title	Author	Date	Contact for paper
WPS1801	Regional Integration as Diplomacy	Maurice Schiff L. Alan Winters	August 1997	J. Ngaine 37947
WPS1802	Are There Synergies Between World Bank Partial Credit Guarantees and Private Lending?	Harry Huizinga	August 1997	P. Sintim-Aboagye 38526
WPS1803	Fiscal Adjustments in Transition Economies: Social Transfers and the Efficiency of Public Spending: A Comparison with OECD Countries	Barbara Fakin Alain de Crombrugghe	August 1997	M. Jandu 33103
WPS1804	Financial Sector Adjustment Lending: A Mid-Course Analysis	Robert J. Cull	August 1997	P. Sintim-Aboagye 37644
WPS1805	Regional Economic Integration and Agricultural Trade	Junichi Goto	August 1997	G. Ilogon 33732
WPS1806	An International Statistical Survey of Government Employment and Wages	Salvatore Schiavo-Campo Giulio de Tommaso Amitabah Mukherjee	August 1997	M. Guevara 32959
WPS1807	The Ghosts of Financing Gap: How the Harrod-Domar Growth Model Still Haunts Development Economics	William Easterly	August 1997	K. Labrie 31001
WPS1808	Economic Transition and the Distributions of Income and Wealth	Francisco H. G. Ferreira	August 1997	M. Geller 31393
WPS1809	Institutions in Transition: Reliability of Rules and Economic Performance in Former Socialist Countries	Aymo Brunetti Gregory Kisunko Beatrice Weder	August 1997	M. Geller 31393
WPS1810	Inspections and Emissions in India: Puzzling Survey Evidence about	Sheoli Pargal Muthukumara Mani Mainul Huq	August 1997	E. Krapf 80513
WPS1811	Agricultural Development: Issues, Evidence, and Consequences	Yair Mundlak Donald F. Larson Al Crego	August 1997	P. Kokila 33716
WPS1812	Managing Guarantee programs in Support of Infrastructure Investment	Michael Klein	August 1997	S. Vivas 82809
WPS1813	Tackling Health Transition in China	Shaikh I. Hossain	August 1997	C. Anbiah 81275
WPS1814	Making Education in China Equitable and Efficient	Shaikh I. Hossain	August 1997	C. Anbiah 81275

Policy Research Working Paper Series

	Title	Author	Date	Contact for paper
WPS1815	Unfair Trade? Empirical Evidence in World Commodity Markets Over the Past 25 Years	Jacques Morisset	August 1997	N. Busjeet 33997
WPS1816	Returns to Regionalism: An Evaluation of Nontraditional Gains from Regional Trade Agreements	Raquel Fernandez	August 1997	J. Ngaine 37947
WPS1817	Should Core Labor Standards Be Imposed through International Trade Policy?	Keith E. Maskus	August 1997	J. Ngaine 37947
WPS1818	What Affects the Russian Regional Governments' Propensity to Subsidize?	Lev Freinkman Michael Haney	August 1997	N. Campos 38541
WPS1819	The Argentine Pension Reform and Its Relevance for Eastern Europe	Dimitri Vittas	August 1997	P. Infante 37642